REMARKS

The Office Action mailed January 18, 2007 has been carefully considered.

Claims 1-2, 6-9, 13-16, 20 and 21 are pending and stand rejected.

Claims 1, 8 and 15 have been amended.

Rejection under 35 USC 112

The Examiner has rejected claims 1, 8, and 15 under 35 USC 112, first paragraph for allegedly containing subject matter which is not described in the specification.

Applicant respectfully disagrees with the rejection, but has amended the aforementioned claims in a manner suggested by the Examiner. No new matter has been added. Support for the amendment may be found at least on page 15, lines 11-12 ("The Protected Restore Map is used to track those extents that are modified due to host write requests during the Protected Restore.").

The Examiner has rejected claims 1, 8, and 15 under 35 USC 112, second paragraph for allegedly containing subject matter which is not described in the specification.

Applicant respectfully disagrees with the rejection of the claims, but has amended the aforementioned claims as indicated above.

Applicant believes that the rejection of the claims under 35 USC 112, first and second paragraphs have been overcome in view of the amendments made to the claims and respectfully requests that the rejection be withdrawn.

Rejection under 35 USC 102

The Examiner has rejected claims 1,-2, 6-9, 13-16 and 20-21 under 35 USC 102(e) as being anticipated by Young (USP no. 6,898,681), which is the same reference cited in rejecting the claims in the prior Office Action. In the instant OA, the Examiner further states that during the "recording [step] ... The shadow bitmap represents the protected restore map" and during the "setting [step] ... the shadow bitmap at the completion of recovery or restoration represents the delta clone map." (see page 5, lines 4-13, instant OA).

Applicant respectfully disagrees with the reason for the rejection of the claims. However, the claims have been amended to recited that "copying being determined by a clone delta map used to track extents of the clone that are different between the clone and the source and a protected restore map used to track extents of the source that are modified during the restoring

step." No new matter has been added. Support for the amendment may be found at least on page 15, lines 15-18, ("When a host-write request is received for the Source LU during a Protected Restore, a determination is made whether a COD is required prior to processing the request. This determination is made by checking both the Delta Map and the Protected Restore Map.").

Referring to Figure 6c, Young discloses that information in the shadow bitmap is transferred to a copy bitmap and the shadow bit map is cleared (S30b). When new data is to be written to the master store (S30b) the data is copied to the subsidiary store(S34b), the copy bitmap bit is set to zero (S35b) and the corresponding bit in the shadow bit map is set to 1 (s36b). Processing continues to the step 37B to determine whether all blocks have been copied. If not, the processing continues again at step 31b. However, if all the blocks are completed then the processing is ended.

Thus, Young discloses dynamically updating the shadow bitmap during the restoration step. However, Young teaches that the updating of the source is performed based on the copy bitmap, which is determined from the initial shadow bitmap in step S30b. The dynamically updated shadow bitmap is not used in determining the extents to be copied. See col. 10, lines 33-36, "After S33b or S336b, the point in time copy controller checks at s37b whether all the data blocks have been copied back ... from the shadow store (by checking whether any of the copy bits are still 1).").

Young fails to disclose that the updating is based on the delta clone map and the restore protected map as is now recited in the claims.

It is well recognized that to constitute a rejection pursuant to 35 USC §102, i.e., anticipation, all material elements recited in a claim must be found in one unit of prior art. Young cannot be said to anticipate the present invention, because Young fails to disclose each and every element recited.

At least for this reason, applicant submits that the rejection of the independent claims has been overcome and can no longer be sustained. Applicant respectfully requests withdrawal of the rejection and allowance of the claim.

With regard the remaining claims, these claims ultimately depend from the independent claims, and are also allowable by virtue of their dependency from an allowable base claim.

Accordingly, it is respectfully requested that the rejection be withdrawn and the claims allowed.

In view of the foregoing, the applicant believes that the application is in condition for allowance and respectfully request favorable reconsideration.
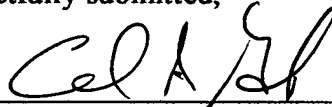
In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (914)-798-8505.

The Examiner is authorized to charge any fees necessary for the filing of this Amendment to EMC Corporation deposit account No. **05-0889,** as indicated on the Transmittal Letter, filed in duplicate herewith.

Respectfully submitted,

Dated: 5/9/07

Carl A. Giordano, Esq. (Reg. No. 41,780)
Attorney for Applicant
EMC Corporation
Office of General Counsel
44 S. Broadway, 7th flr.
White Plains, NY 10989
(914) 798 8505

Please direct all communications to:
EMC Corporation
Office of General Counsel
176 South Street
Hopkinton, MA 01748